

# Assessing the Needs and Measuring the Impact of the Information Literacy Sessions at the Aga Khan University's Institute for Educational Development, Pakistan

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**Abstract** - Main objective of this paper is to assess the information literacy needs of the fresh M.Ed. students at the AKU-IED and to measure the impact of the information literacy sessions over the students by using the pretest and posttest tool. Document the users' reflections to improve the forthcoming information literacy sessions. Pretest questionnaire was sent to the M.Ed. students of AKU-IED to know the information literacy needs, and to know about their understanding about collection, OPAC and e-resources. As a result needs identified through this questionnaire were addressed in the information literacy session. This hands-on information literacy session was complimented with the handouts and assignments were given to the students as well. After the information literacy session, posttest questionnaire was sent to the users. This posttest questionnaire was having some questions taken from the pretest with a purpose to measure the impact the session had made over the students. This measurement was carried out by comparing the responses collected in the pretest and posttest. Posttest questionnaire was also having the questions to know the users reflections about the weak part of the session, strongest part of the session and their opinion to improve the forthcoming sessions. Present results showed the weak areas of the students which include the concepts of call number, classification number, author mark, ways to access the library collection, use of OPAC, databases, full-text articles were needed to be covered in the IL session. Some areas needed less attention and time during the sessions because majority of the students were already familiar to them. These were concepts of on-campus access, type of searches through OPAC and the definition of OPAC. Posttest analysis showed us the impact the session has made.

**Keywords:** Information Literacy; User training; Information Literacy Standards; Information Literacy Assessment Tools.

## I. INTRODUCTION

Information literacy might have been a new concept in the industry of library and information services but we the librarians have been engaged with this activity from decades with the name of user's education. Information literacy is a new shape or a new name of *library instructions, bibliographic instructions, and reader education*. (Rader, 1991). History of information literacy in Pakistan is not different than any other country as we were also doing it with a different name in the past. Changing information technology had a great impact over the information services offered by the libraries and triggered the need to redesign the old services to incorporate the

changing needs. (Bhatti, 2010; Mujahid, 1983; Samadani, 1998).

According to American Library Association information literacy is a set of skills required to "recognize when information is needed and have the ability to locate, evaluate, and use effectively the needed information." (ACRL, 2013).

Higher Education Commission also placed a greater emphasis to the IL. HEC has organized many travelling workshops and seminars until now and reminded librarians of their forgotten role of conducting information literacy session and introduced a culture which could be used as model to replicate at the university level. HEC trained 8850 fellows from year 2003 till 2006 (Saïd & International Network for the Availability of Scientific Publications, 2006).

*"The greatest challenge is identified as being spreading awareness and encouraging the use of resources acquired, there is a big variation in use between different institutions. Although the Digital Library team at the HEC is predominantly qualified in ICT librarians are identified as a catalyst in spreading the awareness and bridging the gap."* (Saïd & International Network for the Availability of Scientific Publications, 2006)

Aga Khan University (AKU) Libraries very similar to other libraries were conducting the information literacy sessions without having a formal mechanism of assessing users training needs, their understanding/IT skills level, background, and educational qualification. There are nine libraries in AKU libraries network which includes four libraries in Pakistan, four libraries in East Africa, and one in UK.

AKU libraries followed the AKU's operations principles of quality, relevance, impact, and access and took the advantage of the expertise of the University of Alberta and started working together to train the librarian of the AKU in East Africa. This initiative was one of the steps in achieving the University's mission of developing human capacities through the discovery and dissemination of knowledge, and application through service.

These training sessions enabled AKU librarians to use an open source tool WASSAIL to assess the user's needs (pretest), assess the quality of the contents, measure the performance of the presenter and the impact a session have made over the participants (posttest). In addition AKU Librarians also learnt about implementing the Information literacy standards at the university.

AKU's Institute for Educational Development (AKU-IED) library started the practice of using pretest and post-test measurement tool to know the user's needs, to evolve information literacy sessions according to the identified needs, and then to assess the impact of session on the M.Ed students.

## II. AIM OF THE STUDY

Main objective of this paper is to assess the information literacy needs of the fresh M.Ed. students at the AKU-IED and to measure the impact of the information literacy sessions over the students by using the pretest and posttest technology. Document the users' reflections to improve the forthcoming information literacy sessions.

## III. METHODOLOGY

Two questionnaires were sent to the users. One was sent before the session (pre-test) and other was sent after the

session (post-test). Pre-test questionnaire was meant to collect the demographical information of the users, their knowledge and understanding about collection, OPAC, and e-resources. Out of forty students twenty nine students participated in the IL session. The questionnaire was a mix of qualitative and quantitative questions. This questionnaire was sent through WASSAIL.

The results collected through the pre-test method helped design the contents for the IL session. Only need driven areas were taken on board for the session. The session was also complimented with the handouts and assignments for students to do during the session. These assignments also helped to know if the students are learning during the session.

At the end of the session students were requested to fill out another questionnaire with some of the question repeated from the pre-test questionnaire and some questions were new. Post-test questionnaire with some pretest questions helped us analyze the impact the session has made over the students. In addition this questionnaire also helped us know the weakest part of the session, strongest part of the session, and how forthcoming sessions can be improved. WASSAIL analysis helped us compare the students understanding before the sessions and after the session.

## IV. RESULTS AND DISCUSSION

The questionnaire was sent to twenty nine M.Ed students out of which 12 were males and 17 were females.

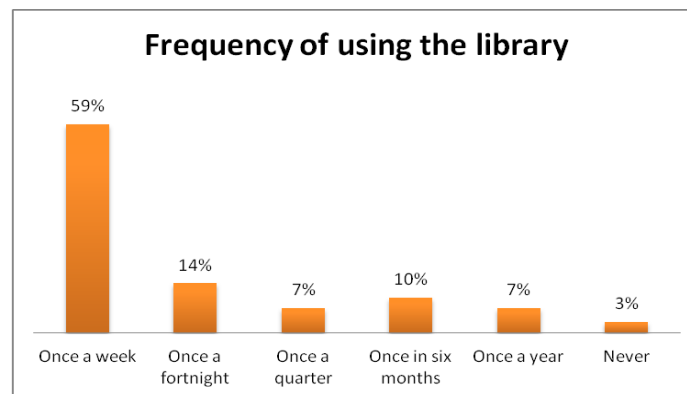


Fig.1 Frequency Of Using The Library

Despite the participants were from remote locations like of Gilgat, Baluchistan, Interior Sindh but almost 60% of them

were visiting library at least once a weak, whereas others were having a mix habit of visiting the library.

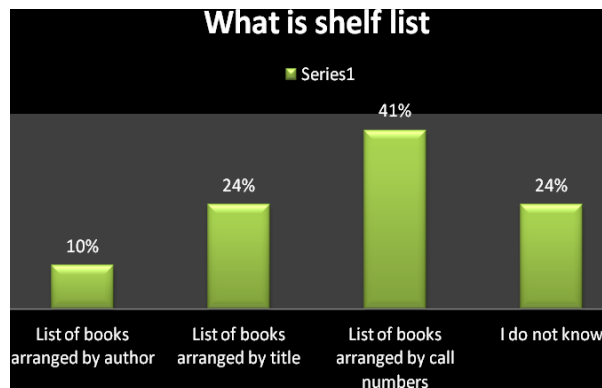


Fig.2 Shelf List

For the use of the catalogue and access to the library collection, responses to the question about the shelf list shows that 41% of the students know about it but rest of

58% needs this topic to be covered in the information literacy session.

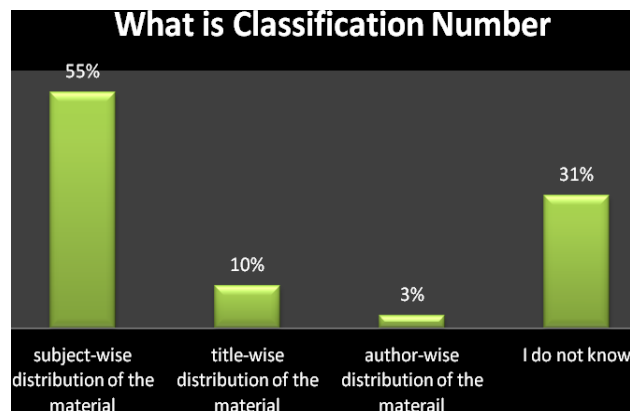


Fig.3 Classification Number

This result about the question of classification number shows a good response of 55% already knowing about it,

whereas 46% of the students still wanted this topic be covered in the information literacy session.

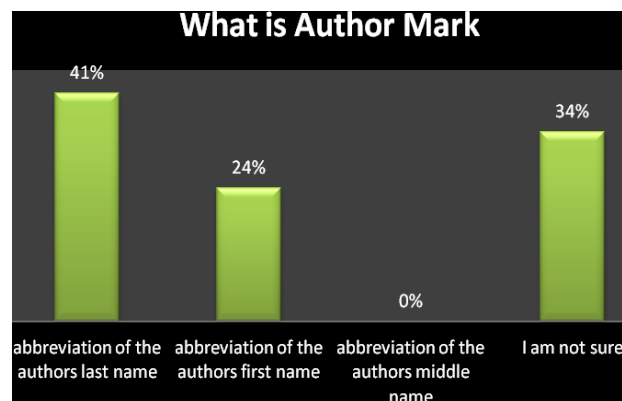


Fig.4 Author Mark

The responses for the questions of author mark shows that 41% of the students already knew about the author mark whereas there was still a need to cover this topic in the

session as 58% students were not clear about this area and opted for the wrong option.

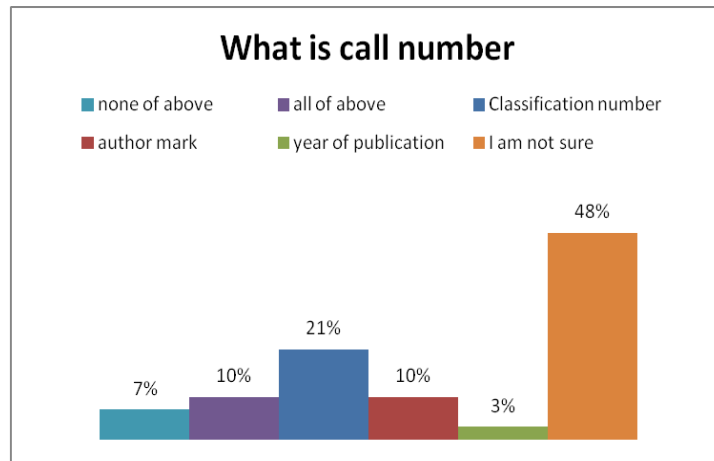


Fig. 5 call Number

Responses for the question of call number showed that 48% were familiar with the call number whereas 51% still needed this topic be covered in the information literacy session.

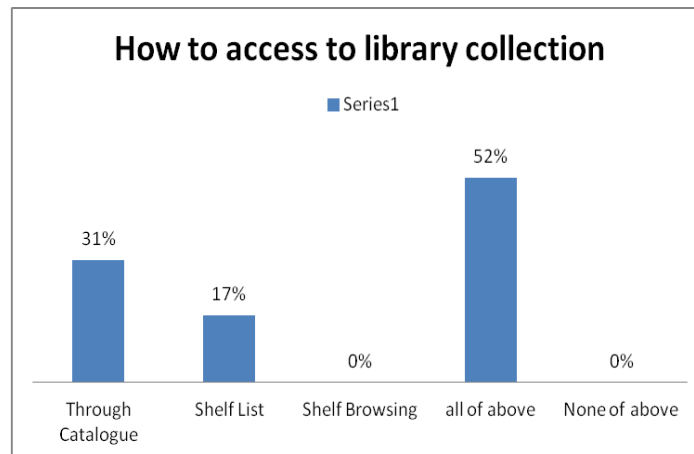


Fig.6 Access To Library Collection

The questions about the access to library collection brought us the responses making the librarian add this topic in the information literacy session as 48% of the users were not familiar with it.

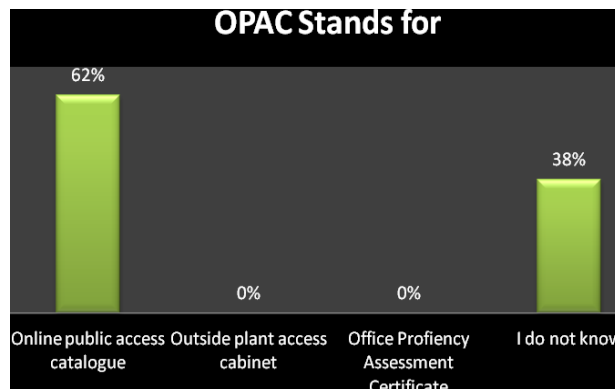


Fig. 7 OPAC

The responses for this question show that 38% of the users are not familiar with the OPAC.

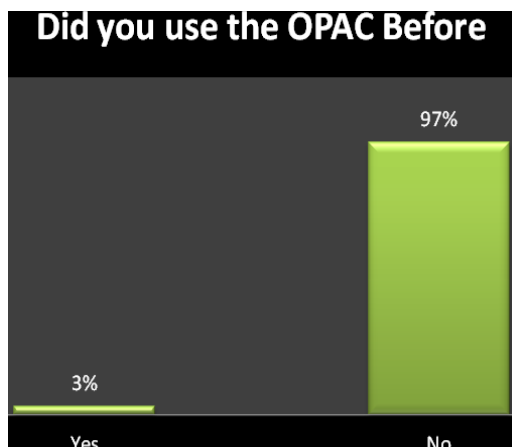


Fig. 8 Use of OPAC

The students were not familiar with OPAC as 97% of them might have heard about it but they didn't actually use it. didn't use it before whereas those knowing about OPAC

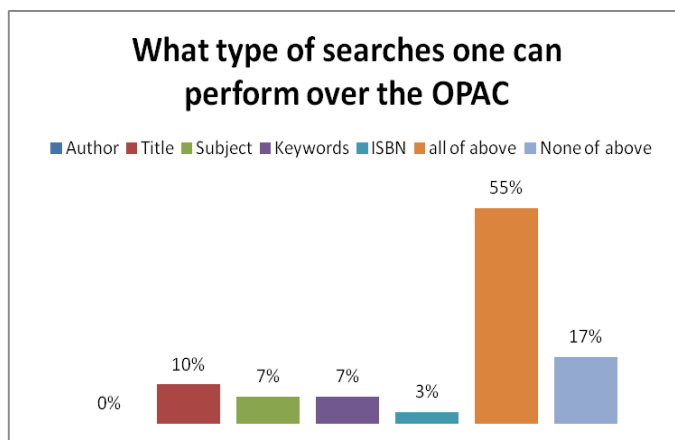


Fig.9 Type Of Search Over the OPAC

Despite 97% of users didn't use OPAC before joining the perform with OPACs as 55% of the students were familiar with the type of searches one can perform with OPACs. AKU-IED but they had a fair idea of searches one can

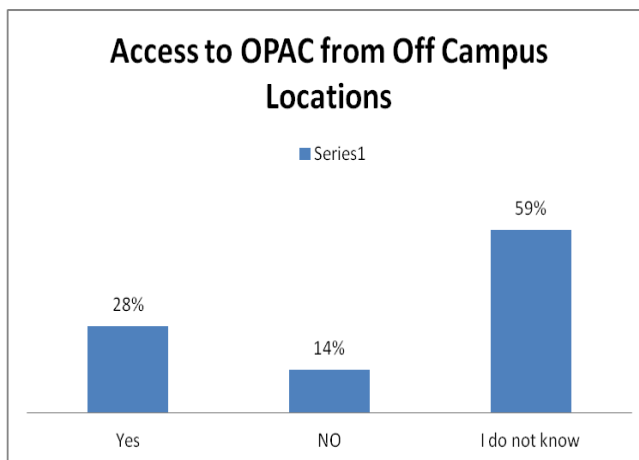


Fig.10 Access to OPAC From Off Campus Location

Almost 60% of the users were not familiar if we could access the OPAC from off campus locations or not, whereas 28% knew that we can access it off campus as well.

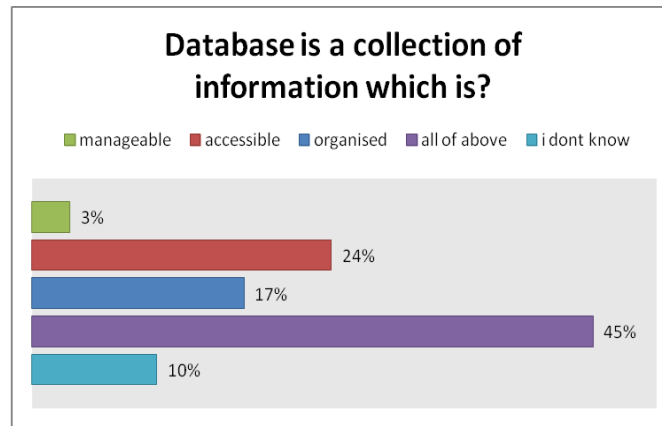


Fig.11 Knowing The Database

45% users knew about databases and 54% were not familiar with databases was the response of the students to a question about database.

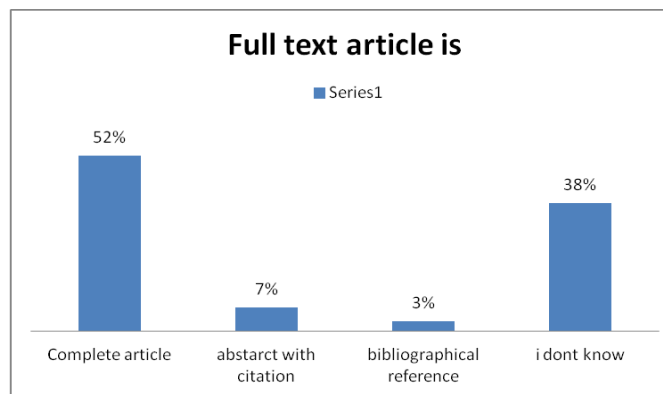


Fig.12 Full Text Article

48% of the users didn't know about the full text article whereas 52% were familiar with what a full text article is.

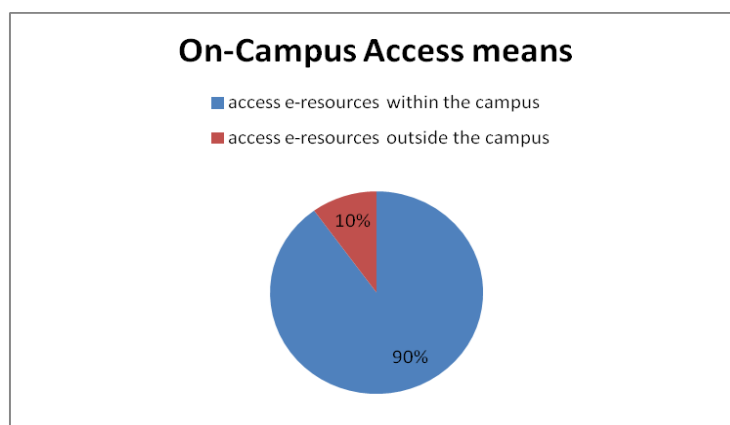


Fig. 13 On Campus Access

Majority of the users knew about the on-campus access and about the off-campus access. However 10% users wanted to cover this topic in the session being not familiar to it.

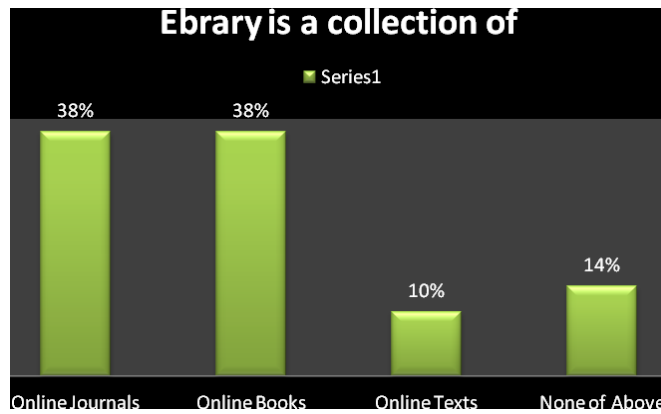


Fig. 14 E- Library

Only 38% of the users knew about Ebrary, where rest needed a session to know more about it. Main reason for not knowing these terms of e-resources was that the users didn't

use any databases in the past which is evident from the data collected below as only 3% of the users used it before joining the AKU-IED.

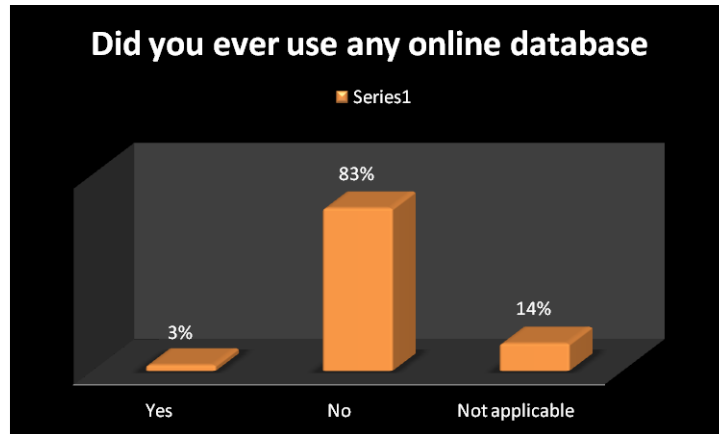


Fig. 15 Online Database

**Posttest Responses and analysis:**

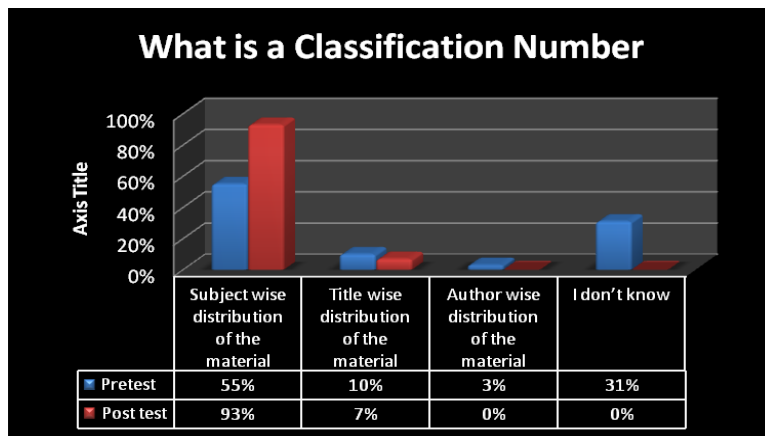


Fig. 16 Classification Number

Percentage of users increased from 55% to 93% in selecting the right option while sharing their responses for a question of classification number. 38% users' responses increased in

selecting the right option which is the impact of the session. The users giving the wrong answers before the session has now been decreased from 44% to 7%.

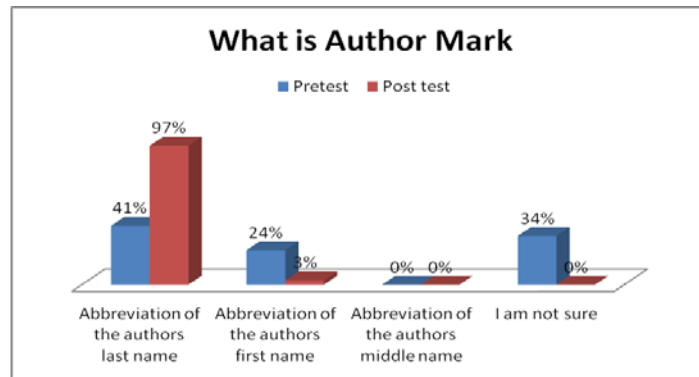


Fig.17 Author Mark

There is 56% difference in the pre-test and post-test in selecting the right option to answer the question about

author mark. The users giving wrong answers are decreased from 58% to zero percent.

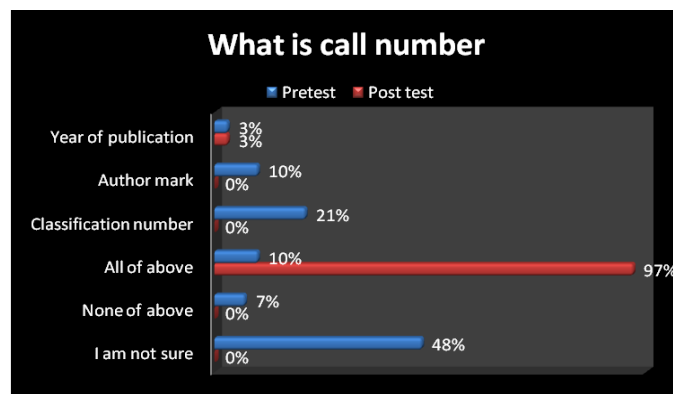


Fig. 18 Call Number

Number of occurrences increased from 10% to 97% means 87% more users learned about the call number.

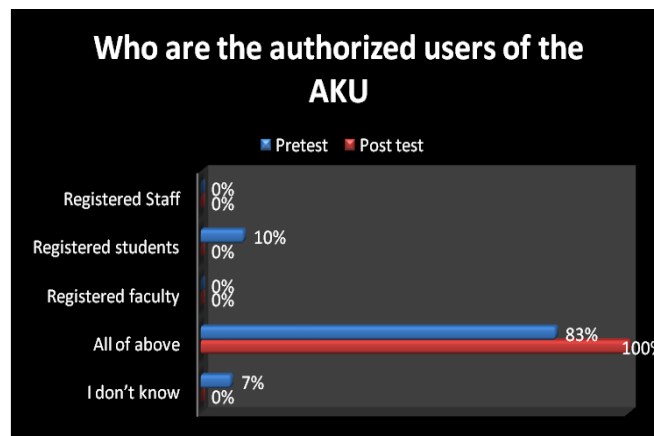


Fig. 19 Authorized Users

83% users knew about the authorized users before the session but rest of the 17% learned during the session. This question also shows that majority of the users knew about

this question even before the session. However session has also had a little impact with the increase only of 17%.



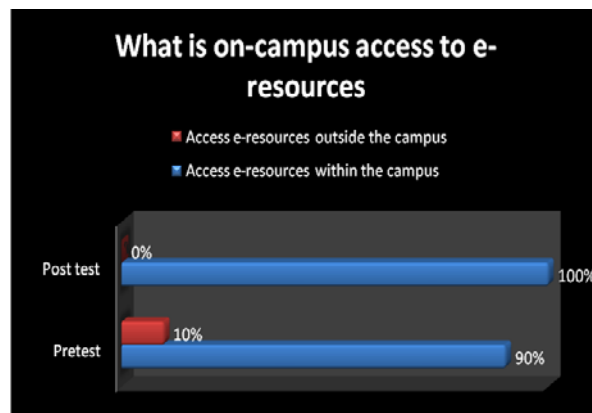


Fig.20 On Campus Access To E-Resources

Again in this question most of the students already knew about this question and the session once again had a little impact by increasing users from 90% to 100%. The reason for not leaving this topic out of the session was that there are still 10% users who still need training in this area. For the class impact this was 10% increase but for those individuals falling in this 10% the impact was 100% as they know now what on-campus access is.

#### ***The Weakest Part of the Session***

51% of the participants appreciated the session and said there was no major weakness of the session however some of the participants shared that they need more time to practice themselves, and these sessions should also be refreshed every now and then. 14% of the participants thought that the power failure and internet breakdown due to the power failure was the weakest part of the session. Rest of the participants didn't answer this question and opted "I prefer not to answer".

#### ***The strongest part of the session***

41% users appreciated the teacher's efforts in conducting the session, and shared this was an interactive session, they were paid the individual attentions, and everything was told in step by step manner which made it easy to understand. 34% of the users were happy with the hands on nature of the session and named it with the practical session as they practiced it as well. 10% of the users got excited to access the e-resources and full text articles/books. 14% preferred not to answer.

#### ***Improving the sessions in future***

34% users suggested to continue with the hands on and practical sessions as this gives them confidence of searching the material on their own. 28% preferred not to answer. 17% users shared they need more practice in their own time and for this purpose library can give them some assignments. 7% users suggested that should do these sessions frequently to work as refresher courses. 10% users suggested other areas for the training which includes endnote and the use of Boolean operators with search

engines.

## **V. DISCUSSION**

Pretest results showed the users strengths and weaknesses. Weaknesses were considered as content to cover in the information literacy session. Librarian's assumption that the users would be familiar with the terms like of call number, classification number, author mark didn't work. There was a need to talk about these areas to help the users learn and to use the catalogue meaningfully.

Areas in which users were strong in the pretest were also taken on board in this case. For example 90% users gave the right answers to the question "What is off-campus access". Only 10% percent users didn't know about it. This 10% made the library take this topic on board because they also had right to know about it. However other 90% felt like re-inventing the wheel because they already knew about it. The ideal situation could have been to conduct two different sessions for these two groups of users. Since this great difference was found only in couple of questions that's why two different sessions were not considered. Interactive style of session also engaged the students who already knew about these areas.

One of the strong points of using this pre-test tool was that it was based on the user's needs and didn't have any unwanted topic to cover. WASSAIL also helped analyze the data not only for pretest, posttest but also to create comparative data of pretest and posttest. The questions evolved for this session will stay in the questions bank and can be used for other information literacy session for any other topic, if relevant.

Post-test analyses gave us the impact the session has made and library came across with weak areas, the strong areas, and the ways these sessions can be improved in the future. This helped the library know about the situation before the session and after the session. Looking at the individual topics covered in the session one can see the impact made.

TABLE I PRE-TEST AND POST-TEST OCCURENCES OF RIGHT ANSWERS

Question about	Pre-test occurrences of right answer	Post-test occurrences of right answer	Difference
Call Number	10%	97%	87%
Author Mark	41%	97%	56%
Classification number	55%	93%	38%
Authorized users of AKU	83%	100%	17%
On campus access	90%	100%	10%

Handout cum assignments given to the students also helped to know the users understanding. The students facing problem with the given assignments were assisted by the teaching assistants to help them complete the tasks.

In the broader context, it is important to note that the most users were from the remote locations of Pakistan and were not familiar with e-resources, and their associated concepts as they haven't had access to them and there is no department working to provide the access to the students at the higher secondary level and degree college level so that the students are familiar with the world of electronic resources by the time they reach to the higher education institutions. The model of HEC can be replicated to provide the access to the higher secondary schools and degree colleges.

Matters about information resources, services and information literacy can be addressed only if the schools and colleges provide the library services to the students but about two-fifth of 118 boys high schools monitored by FAFEN in 2012 doesn't have libraries (FEIM, 2012), whereas 55% of 61 girls schools monitored by FAFEN in the year 2011 doesn't have libraries. (FEIM, 2011). "The school libraries are in their embryonic stage of development. The college libraries also present a gloomy picture with no signs of improvement"(Haider, 2012).

Developed world has already integrated information literacy as part of their curriculum and education sector in Pakistan is yet struggling with the development of libraries, access to internet and information resources. In the absence of electronic resources at the degree colleges and higher secondary level institutions information literacy sessions have not been organized at all, not even for the open access resources to help students improve the quality of their work. These sessions could have raised the users' awareness of the electronic resources to prepare them for their plans of higher education. There is a need of adopting information literacy

standards not only for the higher education sector but for the higher secondary and degree college level as well.

## VI. CONCLUSION

Pretest and posttest using WASSAIL helped to know the information needs and measure the impact the session has made which ultimately made the library follow the university's principles of operations that include quality, relevance, impact, and access. In the absence of formal IL classes pretest and posttest turned out to be a useful tool to introduce evidence based learning.

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